

Title (en)
TRANSPORT SYSTEM FOR NANOPARTICLES AND METHOD FOR THE OPERATION THEREOF

Title (de)
TRANSPORTSYSTEM FÜR NANOPARTIKEL UND VERFAHREN ZU DESSEN BETRIEB

Title (fr)
SYSTEME DE TRANSPORT DE NANOPARTICULES ET SON MODE DE FONCTIONNEMENT

Publication
EP 1756326 A1 20070228 (DE)

Application
EP 05758913 A 20050608

Priority
• DE 2005001051 W 20050608
• DE 102004030523 A 20040618

Abstract (en)
[origin: WO2005123978A1] The invention relates to a transport system for dry nanoparticles (18b). According to the invention, the nanoparticles (18b) are magnetised or electrically charged for transportation, a magnetic or electrical field is produced by means of a field generator (20a, 20) in the transport channel, and the nanoparticles (18b) migrate through the transport channel (12). The nanoparticles can be discharged through a discharge opening (13) which enables dosing to take place. In order to agglomerate the nanoparticles (18b) or to prevent attachment onto the inner wall (26), a coating (27) of the wall can be offset in oscillations by means of piezo electric actuators (28), said oscillations being transferred to the nanoparticles (18b). The dry nanoparticles can be handled in an advantageous manner due to the transport system, such that said dry nanoparticles need not be treated as a suspension.

IPC 8 full level
B65G 54/02 (2006.01); **C23C 14/24** (2006.01)

CPC (source: EP US)
C23C 14/246 (2013.01 - EP US); **Y10T 137/0391** (2015.04 - EP US); **Y10T 137/2082** (2015.04 - EP US); **Y10T 137/2191** (2015.04 - EP US)

Citation (search report)
See references of WO 2005123978A1

Designated contracting state (EPC)
CH DE FR LI

DOCDB simple family (publication)
WO 2005123978 A1 20051229; CN 1957105 A 20070502; DE 102004030523 A1 20060112; DE 502005008242 D1 20091112;
EP 1756326 A1 20070228; EP 1756326 B1 20090930; JP 2008502795 A 20080131; RU 2007101723 A 20080727; US 2008023087 A1 20080131;
US 7699077 B2 20100420

DOCDB simple family (application)
DE 2005001051 W 20050608; CN 200580016590 A 20050608; DE 102004030523 A 20040618; DE 502005008242 T 20050608;
EP 05758913 A 20050608; JP 2007515770 A 20050608; RU 2007101723 A 20050608; US 62849805 A 20050608